

Théo Delemazure

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Domains of expertise: Computational Social Choice, Voting Theory, Voting Experiments, Data Analysis.

Education

Paris-Dauphine University - PSL <i>PhD in Computer Science</i>	Sept 2021 – June 2025
Title: Expressive Ballots for Voting Systems and Political Analysis. Advisors: Jérôme Lang and Dominik Peters.	
École Normale Supérieure (ENS) <i>ENS Diploma in Computer Science</i>	Sept 2017 – July 2021
Paris Science et Lettres (PSL) University <i>Master in Artificial Intelligence, Systems and Data</i>	Sept 2019 – July 2020

Research Internships

TU Berlin	April - July 2021
Advisor: Prof. Markus Brill.	
Lincs, Nokia Bell Labs, Paris	October 2020 - April 2021
Title: Elections with embedded voters. Advisors: François Durand, Fabien Mathieu.	
École Normale Supérieure, Paris	March - August 2020
Title: A Knowledge Base of Mathematical Results. Advisor: Prof. Pierre Senellart.	
New York University	March - August 2019
Title: Algorithms and Systems for Computational Social Choice: Incorporating Context into Preference Aggregation. Advisor: Prof. Julia Stoyanovich.	
Inria Lille	June - July 2018
Title: Make understandable the access controls of social networks. Advisors: Pierre Bourhis, Romain Rouvoy, Walter Rudametkin.	

Research Visits

University of Toronto	March 2024
Host: Nisarg Shah	
AGH University of Science and Technology	May 2024
Host: Piotr Faliszewski	

Publications

[W2] Reallocating Wasted Votes in Proportional Parliamentary Elections with Thresholds 10.48550/arXiv.2503.17156 ↗	Working Paper
<i>Théo Delemazure</i> , Rupert Freeman, Jérôme Lang, Jean-François Laslier, and Dominik Peters	
[W1] Do Grades Have Absolute Meaning? An Experiment on Majority Judgment	Working Paper
Antoinette Baujard, Sylvain Bouveret, Roberto Brunetti, <i>Théo Delemazure</i>	

[C9] **Generalizing Instant Runoff Voting to Allow Indifferences** EC-2024
[10.48550/arXiv.2404.11407](https://doi.org/10.48550/arXiv.2404.11407) [↗](#)
Théo Delemazure, Dominik Peters

[C8] **Comparing Ways of Obtaining Candidate Orderings from Approval Ballots** IJCAI-2024
[10.24963/ijcai.2024/305](https://doi.org/10.24963/ijcai.2024/305) [↗](#)
Théo Delemazure, Chris Dong, Dominik Peters, Magdalena Tydrichova

[C7] **Selecting the Most Conflicting Pair of Candidates** IJCAI-2024
[10.24963/ijcai.2024/306](https://doi.org/10.24963/ijcai.2024/306) [↗](#)
Théo Delemazure, Łukasz Janeczko, Andrzej Kaczmarczyk and Stanisław Szufa

[C6] **Independence of Irrelevant Alternatives under the Lens of Pairwise Distortion** AAAI-2024
[10.1609/aaai.v38i9.28821](https://doi.org/10.1609/aaai.v38i9.28821) [↗](#)
Théo Delemazure, Jérôme Lang and Grzegorz Pierczynski

[C5] **Aggregating Correlated Estimations with (Almost) no Training** ECAI-2023
hal.science/hal-04195384v1 [↗](#)
Théo Delemazure, François Durand, Fabien Mathieu

[C4] **Measuring a Priori Voting Power – Taking Delegations Seriously** IJCAI-2023
[10.24963/ijcai.2023/290](https://doi.org/10.24963/ijcai.2023/290) [↗](#)
Rachael Colley, *Théo Delemazure*, Hugo Gibert

[C3] **Strategy-Proofness and Proportionality in Party-Approval Multi-Winner Elections** AAAI-2023
[10.1609/aaai.v37i5.25694](https://doi.org/10.1609/aaai.v37i5.25694) [↗](#)
Théo Delemazure, Tom Demeulemeester, Manuel Eberl, Jonas Israel, and Patrick Lederer

[C2] **Approval With Runoff** IJCAI-2022
[10.24963/ijcai.2022/33](https://doi.org/10.24963/ijcai.2022/33) [↗](#)
Théo Delemazure, Jérôme Lang, Jean-François Laslier, Remzi Sanver

[C1] **Liquid Democracy with Ranked Delegations** AAAI-2022
[10.24963/ijcai.2022/33](https://doi.org/10.24963/ijcai.2022/33) [↗](#)
Markus Brill, *Théo Delemazure*, Anne-Marie George, Martin Lackner, Ulrike Schmidt-Kraepelin

[J1] **Algorithmic Techniques for Necessary and Possible Winners** TDS-ACM, 2020
[doi/10.1145/3458472](https://doi.org/10.1145/3458472) [↗](#)
Vishal Chakraborty, *Théo Delemazure*, Benny Kimelfeld, Phokion G. Kolaitis, Kunal Relia, Julia Stoyanovich

Datasets

[D4] **Voter Autrement 2012 - Dataset of the In Situ Experiments** 2025
[10.5281/zenodo.15007144](https://doi.org/10.5281/zenodo.15007144) [↗](#)
Antoinette Baujard, Herrade Igersheim, Isabelle Lebon, Frédéric Gavrel, *Théo Delemazure*
Role: Data cleaning and publication.

[D3] **Voter Autrement 2007 - Dataset of the In Situ Experiments** 2025
[10.5281/zenodo.14990024](https://doi.org/10.5281/zenodo.14990024) [↗](#)
Antoinette Baujard, Herrade Igersheim, *Théo Delemazure*
Role: Data cleaning and publication.

[D2] **Voter Autrement 2024 - The Online Experiment** 2024
[10.5281/zenodo.13828295](https://doi.org/10.5281/zenodo.13828295) [↗](#)
Théo Delemazure, Rupert Freeman, Jérôme Lang, Jean-François Laslier, Dominik Peters
Role: Data collection, cleaning and publication.

[D1] **Voter Autrement 2022 - The Online Experiment ("Un Autre Vote")** 2022
[10.5281/zenodo.10568798](https://doi.org/10.5281/zenodo.10568798) [↗](#)
Théo Delemazure, Sylvain Bouveret
Role: Data collection, cleaning and publication.

Talks

[T15] Comparing Ways of Obtaining Candidate Orderings from Approval Ballots	2024
<i>International Joint Conference on Artificial Intelligence 2024, Jeju Island, South Korea</i>	
[T14] Independence of Irrelevant Alternatives under the Lens of Pairwise Distortion	2024
<i>17th Meeting of the Society for Social Choice and Welfare, Paris, France</i>	
[T13] Generalizing Instant Runoff Voting to Allow Indifferences	2024
<i>COMSOC Seminar, Online</i>	
[T12] Comparing Ways of Obtaining Candidate Orderings from Approval Ballots	2024
<i>Lamsade Doctoral Spring School, Piscop, France</i>	
[T11] Aggregating Correlated Estimation with (almost) no Training	2023
<i>European Conference on Artificial Intelligence 2023, Krakow, Poland</i>	
[T10] Measuring a Priori Voting Power – Taking Delegations Seriously	2023
<i>International Joint Conference on Artificial Intelligence 2023, Macao, China</i>	
[T9] Measuring a Priori Voting Power – Taking Delegations Seriously	2023
<i>GDR ROD et RADIA – Groupe de travail “Théorie algorithmique de la décision et des jeux”, Paris, France</i>	
[T8] Voter Autrement 2022: How do people react to alternative voting methods?	2023
<i>Lamsade Day, Paris, France</i>	
[T7] Approval with Runoff	2023
<i>Advances in Economic Design : Games, voting, information and measurement, Paris, France</i>	
[T6] Approval with Runoff	2023
<i>Social Choice Seminar, Caen, France</i>	
[T5] Liquid Democracy with Ranked Delegations	2022
<i>Liquid Democracy Workshop, Zurich, Switzerland</i>	
[T4] Approval With Runoff	2022
<i>International Joint Conference on Artificial Intelligence 2022, Vienna, Austria</i>	
[T3] Approval With Runoff	2022
<i>Plate-Forme Intelligence Artificielle 2022, Saint-Etienne, France</i>	
[T2] Liquid Democracy with Ranked Delegations	2022
<i>Formal Models of Democracy Workshop, Rotterdam, Netherlands</i>	
[T1] Démocratie à géométrie variable (à l’usage des algorithmes)	2021
<i>23ème Rencontres Francophones sur les Aspects Algorithmiques des Télécommunications, La Rochelle, France</i>	

Teaching

Mathematical foundations for decision theory (tutorials)	2024-2025
<i>Bachelor 3, Paris-Dauphine University</i>	
Relational databases (tutorials and practicals)	2023-2025
<i>Bachelor 3, Paris-Dauphine University</i>	
Algorithm and programmation 3 (tutorials and practicals)	2023-2025
<i>Bachelor 2, Paris-Dauphine University</i>	
Functionnal programming (tutorials and practicals)	2021-2023
<i>Bachelor 3, Paris-Dauphine University</i>	

Reviewing

Journals (referee): Social Choice and Welfare.

Conferences (PC member): AAAI (2023, 2024, 2025)

Non-academic Contributions

- Contributed to the book *Entre elle et lui – Variations sur les asymétries de genre en français* (Éditions de l'Aube). 2025
- Blog posts in french targeted to a general audience, including data analysis of voting experiments and of datasets from the French National Assembly. 2021-2025
<https://theo.delemazure.fr/blog.html>